

AMENDMENTS TO THE CLAIMS:

The following listing of claims replaces all prior versions of the claims and all prior listings of the claims in the present application.

1-41. (Cancelled)

42. (Currently Amended) A process for producing a semifinished product comprising a plurality of elongated reinforcing elements incorporated in an elastomer material, comprising the following steps:

preparing at least one continuous elongated element comprising at least one elongated reinforcing element and a raw elastomer coating applied to said reinforcing element;

winding said continuous elongated element on a forming support to form coils in contact with each other wound around a geometric axis of said forming support;

translating the coils along said geometric axis to a cutting region by moving at least one pusher element with respect to the forming support to push the coils along said geometric axis with the pusher element; and

cutting the coils at the cutting region to form a continuous semifinished product having elongated reinforcing elements disposed parallel to each other, each extending between two opposite longitudinal edges of the semifinished product.

43. (Previously Presented) The process as claimed in claim 42, wherein preparation of the continuous elongated element is carried out by movement of said at

least one elongated reinforcing element lengthwise through an extruder for extrusion of the elastomer coating.

44. (Previously Presented) The process as claimed in claim 43, wherein the continuous elongated element coming out of the extruder is directly connected with the coil being laid down.

45. (Previously Presented) The process as claimed in claim 42, wherein said continuous elongated element comprises a single elongated reinforcing element.

46. (Previously Presented) The process as claimed in claim 42, wherein said continuous elongated element comprises a plurality of elongated reinforcing elements disposed parallel and close to each other.

47. (Previously Presented) The process as claimed in claim 42, further comprising the step of guiding the continuous elongated element along a guide path comprising an end stretch directed to a cylindrical deposition surface presented by the forming support.

48. (Previously Presented) The process as claimed in claim 47, wherein said guide path further has a centring stretch extending in a direction substantially coaxial with the forming support and deflection stretch extending away from the centring stretch to said end stretch.

49. (Previously Presented) The process as claimed in claim 47, wherein the winding step is carried out through rotation of the end stretch of the guide path in a concentric manner with the geometric axis of the forming support.

50. (Previously Presented) The process as claimed in claim 42, wherein two distinct elongated elements are simultaneously submitted to the winding step on the forming support.

51. (Previously Presented) The process as claimed in claim 50 wherein said elongated elements are guided along guide paths having axially opposite centring stretches.

52. (Previously Presented) The process as claimed in claim 42, wherein the translation step is repeated after formation of each coil.

53. (Currently Amended) The process as claimed in claim 42, wherein translation of the coils is carried out by exerting moving said at least one pusher element with respect to the forming support exerts a thrust component parallel to the geometric axis of the forming support on the last coil laid on the forming support.

54. (Currently Amended) The process as claimed in claim 53, wherein ~~the thrust component is exerted by translating a pusher element onto the forming support,~~

~~which pusher element is movable moving said at least one pusher element with respect to the forming support includes moving said at least one pusher element~~ concentrically of said geometric axis substantially in an axially offset plane with respect to a deposition point of the continuous elongated element on the forming support.

55. (Cancelled).

56. (Currently Amended) The process as claimed in claim 42, further comprising the step of counteracting translation of the coils in opposition to said a thrust component translating said coils, to determine a compression of the elastomer coating of each coil against the elastomer coating of the previously laid coil.

57. (Previously Presented) The process as claimed in claim 56, wherein the counter action to translation of the coils is progressively reduced in the direction of the cutting region.

58. (Previously Presented) The process as claimed in claim 53, wherein simultaneously with said thrust component an auxiliary thrust component directed against the forming support is exerted on the last-laid coil.

59. (Previously Presented) The process as claimed in claim 42, wherein the step of cutting the coils is carried out concurrently with the translation step.

60. (Previously Presented) The process as claimed in claim 42, wherein the step of cutting the coils is carried out by arranging a cutter operating in the translation direction of the coils.

61. (Previously Presented) The process as claimed in claim 42, wherein the step of cutting the coils is carried out after translation of same.

62. (Previously Presented) The process as claimed in claim 42, further comprising the step of transferring the coils from the forming member to an auxiliary support member before carrying out the step of cutting the coils.

63. (Previously Presented) The process as claimed in claim 42, further comprising a step of translating the continuous semifinished product onto a collecting plane concurrently with translation of the coils to the cutting region.

64. (Previously Presented) The process as claimed in claim 63, wherein the ends of the cut coils are moved away from each other to lay the continuous semifinished product on the collecting plane.

65. (Currently Amended) A method of producing vehicle tyres, comprising the steps of:

building a carcass structure by at least the steps of:

preparing at least one carcass ply having respectively opposite first and second ends;

mutually joining the opposite ends of the carcass ply to form a carcass sleeve;

associating annular reinforcing structures with respective opposite edges of the carcass sleeve;

giving said carcass structure a toroidal conformation;

preparing a belt structure comprising at least one belt layer;

applying said belt structure to said carcass structure at a radially external position;

laterally applying a pair of sidewalls to the carcass structure at respectively opposite sides thereof;

applying a tread band to said belt structure at a radially external position; and

moulding and curing the tyre;

wherein preparation of at least one element selected between said at least one carcass ply and said at least one belt layer comprises;

producing a semifinished product comprising a plurality of elongated reinforcing elements incorporated in an elastomer material by:

preparing at least one continuous elongated element comprising at least one elongated reinforcing element and a raw elastomer coating applied to said reinforcing element;

winding said continuous elongated element on a forming support to form coils in contact with each other wound around a geometric axis of said forming support;

translating the coils along said geometric axis to a cutting region by moving at least one pusher element with respect to the forming support to push the coils along said geometric axis with the pusher element; and

cutting the coils at the cutting region to form a continuous semifinished product having elongated reinforcing elements disposed parallel to each other, each extending between two opposite longitudinal edges of the semifinished product; and

~~the step of cutting a section of predetermined length from a~~ of the continuous semifinished product ~~obtained from a process as claimed in claim 42.~~

66. (Previously Presented) The method as claimed in claim 65, wherein said tread band is applied by winding at least one first continuous elongated element of elastomer material in circumferential coils on the belt structure.

67. (Previously Presented) The method as claimed in claim 65, wherein said pair of sidewalls is applied by winding at least one continuous elongated element of elastomer material in circumferential coils round said carcass structure.

68. (Currently Amended) An apparatus for producing a semifinished product comprising a plurality of elongated reinforcing elements incorporated in an elastomer material, comprising:

at least one device for preparing at least one continuous elongated element comprising at least one elongated reinforcing element coated with a raw elastomer material applied to said elongated reinforcing element;

at least one device for winding said continuous elongated element on a forming support to form coils in contact with each other and wound around a geometric axis of the forming support;

at least one device for translating the coils along said geometric axis to a cutting region, wherein said at least one device for translating includes at least one pusher element that translates with respect to the forming support to push the coils along said geometric axis; and

at least one cutter to cut the coils at the cutting region to form a continuous semifinished product having elongated reinforcing elements disposed parallel and close to each other, each extending between two opposite longitudinal edges of the semifinished product.

69. (Previously Presented) The apparatus as claimed in claim 68, wherein said device for preparing at least one continuous elongated element comprises at least one extruder for extrusion of the elastomer coating, and devices for moving the elongated reinforcing element lengthwise through the extruder.

70. (Previously Presented) The apparatus as claimed in claim 68, wherein said device for preparing at least one continuous element comprises at least one reel for supply of the continuous elongated element.

71. (Previously Presented) The apparatus as claimed in claim 68, wherein said winding device comprises a guide element slidably engaging the continuous elongated element according to a guide path having an end stretch directed to a deposition surface presented by the forming support.

72. (Previously Presented) The apparatus as claimed in claim 71, wherein said guide element further has a centring stretch extending in a direction substantially coaxial with the forming support and deflection stretch extending away from the centring stretch to the end stretch.

73. (Previously Presented) The apparatus as claimed in claim 71, wherein said winding device further comprises at least one unit for driving the guide element in rotation around the geometric axis of the forming support.

74. (Currently Amended) The apparatus as claimed in claim ~~74~~ 72, wherein said at least one guide element further comprises at least one auxiliary centring stretch axially opposite to said centring stretch to engage a second continuous elongated element.

75. (Currently Amended) ~~The apparatus as claimed in claim 68;~~ An apparatus for producing a semifinished product comprising a plurality of elongated reinforcing elements incorporated in an elastomer material, comprising:

at least one device for preparing at least one continuous elongated element comprising at least one elongated reinforcing element coated with a raw elastomer material applied to said elongated reinforcing element;

at least one device for winding said continuous elongated element on a forming support to form coils in contact with each other and wound around a geometric axis of the forming support;

at least one device for translating the coils along said geometric axis to a cutting region;

at least one cutter to cut the coils at the cutting region to form a continuous semifinished product having elongated reinforcing elements disposed parallel and close to each other, each extending between two opposite longitudinal edges of the semifinished product; and

wherein said device for translating comprises at least one pusher element movable around a deposition surface of the forming support according to a trajectory substantially lying in an axially offset plane relative to a deposition point of the continuous elongated element on the forming support to transmit an axial thrust component to the continuous elongated element laid on the forming support.

76. (Previously Presented) The apparatus as claimed in claim 75, wherein said pusher element is rigidly carried by said at least one winding device.

77. (Currently Amended) The apparatus as claimed in claim 75, further comprising at least one presser element operatively connected with the pusher element to transmit an auxiliary thrust component directed ~~[[to]]~~ toward the forming support to the elongated element.

78. (Previously Presented) The apparatus as claimed in claim 68, wherein the forming support has a deposition surface having at least one end portion tapering toward the cutter.

79-81. (Cancelled)

82. (Previously Presented) A plant for manufacturing a tyre for vehicle wheels, comprising:

devices for preparing semifinished products adapted to form at least one constituent element of the tyre;

at least one device for assembling said semifinished products; and

at least one moulding and curing device;

wherein said devices for preparing the semifinished products comprise an apparatus as claimed in claim 68.

83. (New) A method according to claim 42, wherein moving said at least one pusher element with respect to the forming support to push the coils along said

geometric axis with the pusher element includes translating said at least one pusher element with respect to the forming support to push the coils along said geometric axis with the pusher element.

84. (New) A method according to claim 42, wherein moving at least one pusher element with respect to the forming support to push the coils along said geometric axis with the pusher element includes moving the pusher element around a deposition surface of the forming support according to a trajectory substantially lying in an axially offset plane relative to a deposition point of the continuous elongated element on the forming support to transmit an axial thrust component to the continuous elongated element laid on the forming support.

85. (New) An apparatus according to claim 68, wherein the pusher element moves around a deposition surface of the forming support according to a trajectory substantially lying in an axially offset plane relative to a deposition point of the continuous elongated element on the forming support to transmit an axial thrust component to the continuous elongated element laid on the forming support.